Denise Juneau

Montana Office of Public Instruction

2009 National Assessment of Educational Progress

Trends in Mathematics for Montana

opi.mt.gov

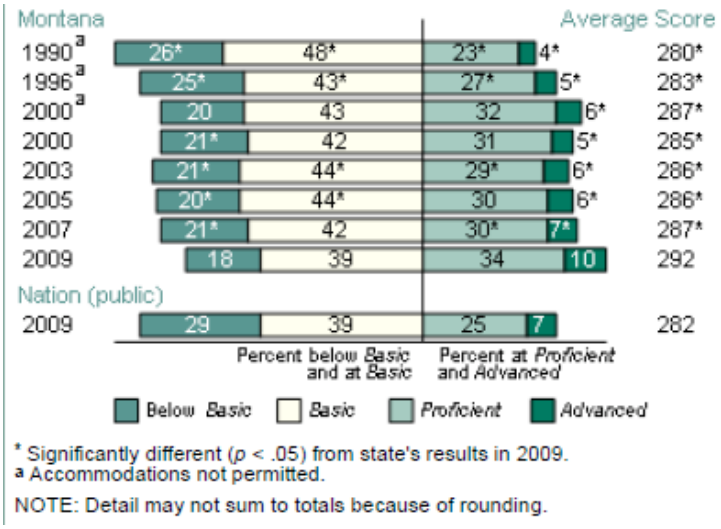
NAEP MONTANA NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS

GRADE 8

Montana Results—GRADE 8 Math

- In 2009, the average score of 8th-grade students in Montana was 292. This was higher than the average score of 282 for public school students in the nation.
- Montana 8th graders scored better than students in all but two other states (MN and MA).
- The average score for students in Montana in 2009 (292) was higher than their average score in 2007 (287) and was higher than their average score in 1990 (280).
- The percentage of students in Montana who performed at or above the NAEP Basic level was 82 percent in 2009. This percentage was greater than that in 2007 (79 percent) and was greater than that in 1990 (74 percent).
- The percentage of students in Montana who performed at or above the NAEP Proficient level was 44 percent in 2009. This percentage was greater than that in 2007 (38 percent) and was greater than that in 1990 (27 percent).

Achievement Level % and Average Score Results

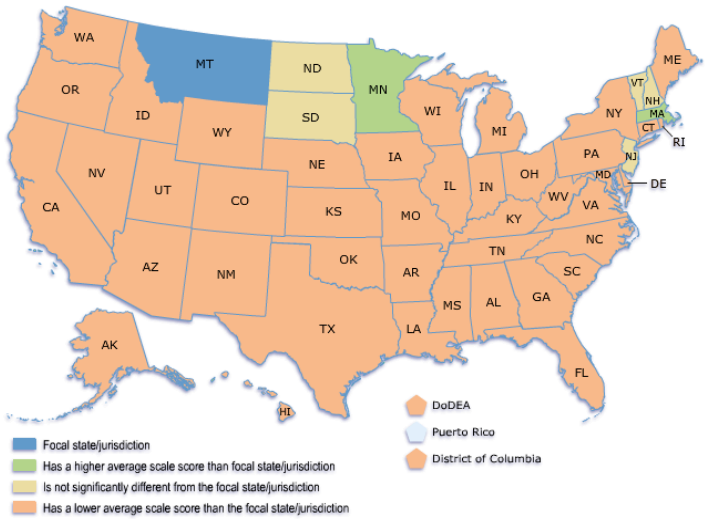


* Significantly different ($p < .05$) from state's results in 2009.
[a] Accommodations not permitted.

NOTE: Detail may not sum to totals because of rounding.

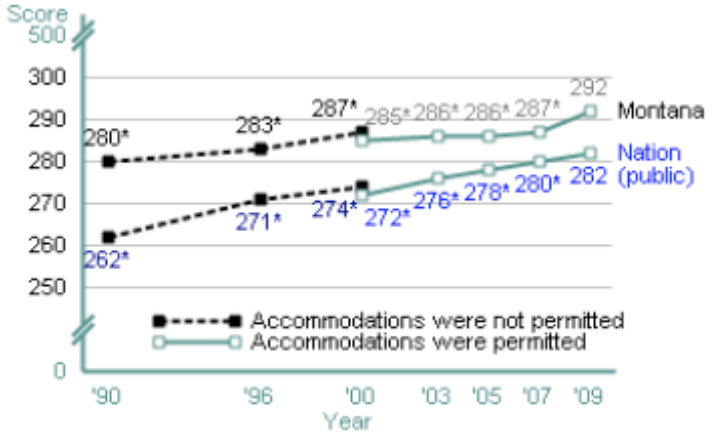
See definitions of Basic, Proficient, and Advanced on p. 2

Compare the Average Score in 2009 to Other States



Green states scored higher than Montana (2). Yellow states are within the same grouping by statistical significance (5). Orange states scored lower than Montana (44).

Compare the Average Score to Nation (public)



* Significantly different ($p < .05$) from 2009.

[**Source**: US Dept. of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990-2009 Mathematics Assessments. October 14, 2009.]

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Montana Results for Student Groups 2009 – GRADE 8 Math

	Reporting Groups	Percent of Students	Avg. Score	Percentages at or above		Percent at
Reporting Groups				Basic	Proficient	Advanced
Gender						
	Male	51	292	82	45	11
	Female	49	291	83	42	9
Race/Ethnicity						
	White	85	296	87	47	11
	American Indian	10	260	51	16	2
	Free/Reduced Lunch Program Eligible	34	277	70	27	3
	Free/Reduced Lunch Program Eligible Not Eligible	66	299	89	52	13

Note: Detail may not sum to totals or 100% because of rounding and because of information not available or statistically insignificant totals not included.

Score Gaps for Student Groups—GRADE 8

- In 2009, 8th-grade male students in Montana had an average score that was not significantly different from that of female students (1 point).
- This performance gap was not significantly different from that in 1990 for 8th graders (6 points).
- In 2009, 8th-grade students who were eligible for free/reduced-price school lunch, an indicator of poverty, had an average score that was 22 points lower than that of students who were not eligible for free/reduced-price school lunch. This performance gap was not significantly different from that in 1996 (24 points).

Definitions

GRADE 8 *Basic (262)*
Eighth-grade students performing at the *Basic* level should exhibit evidence of conceptual and procedural understanding in the five NAEP content areas. This level of performance signifies an understanding of arithmetic operations—including estimation—on whole numbers, decimals, fractions, and percents.

GRADE 8 *Proficient (299)*
Eighth-grade students performing at the *Proficient* level should apply mathematical concepts and procedures consistently to complex problems in the five NAEP content areas.

GRADE 8 *Advanced (333)*
Eighth-grade students performing at the *Advanced* level should be able to reach beyond the recognition, identification, and application of mathematical rules in order to generalize and synthesize concepts and principles in the five NAEP content areas.

[**Source**: US Dept. of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990-2009 Mathematics Assessments. October 14, 2009.]